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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,532	01/20/2004	Jari Vallstrom	879A.0019.U1(US)	3289

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EXAMINER	
NGUYEN, TOAN D	
ART UNIT	**PAPER NUMBER**
2416	
MAIL DATE	**DELIVERY MODE**
03/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/761,532	VALLSTROM ET AL.	
	Examiner	Art Unit	
	TOAN D. NGUYEN	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 12-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 12-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-9 and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Turner et al. (US 7,072,296).

. For claim 5, Turner et al. disclose methods and apparatus for network signal aggregation and bandwidth reduction, comprising:

a means for reducing a number of bits in a voice sample included in a packet to be transmitted and a means for using said reduced bits of the voice sample for transmitting header field data of the same packet in a digital packet-switched cellular network (col. 19, lines 52-59).

For claim 16, Turner et al. disclose methods and apparatus for network signal aggregation and bandwidth reduction, comprising:

a controller (col. 14, lines 42-43) for processing an algorithm for reducing a number of bits in a voice sample included in a packet to be transmitted and using the reduced bits of the voice sample for transmitting header field data in the packet, the

terminal configured to transmit the packet in a digital packet-switched cellular network (col. 19, lines 52-59).

For claim 17, Turner et al. disclose further comprising a memory for storing and retrieving the algorithm (col. 18, line 13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 6-9,12-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al. (US 7,072,296) in view of Bladsjo et al. (US 6,907,030).

For claims 1-4, 6-9 and 18-20, Turner et al. disclose methods and apparatus for network signal aggregation and bandwidth reduction, comprising:

if a terminal of a packet-switched cellular network (figure 1, col. 14, lines 9-10)

estimates that a combined bit count of a voice sample and a header field of a voice packet exceeds an available transmission capacity of a transmission channel allocated to the terminal, then the terminal reduces a number of bits in the voice sample or steals at least one whole voice block (col. 19, lines 55-59); and

the terminal uses the reduced voice sample bits for transmitting the header field data of the same packet, wherein the voice sample and the header field are transmitted in the transmission channel (col. 11, lines 32-36, and col. 19, lines 52-60).

However, Turner et al. do not expressly disclose the transmission channel in real time. In an analogous art, Bladsjo et al. disclose the transmission channel in real time (col. 1, lines 45-46).

Bladsjo et al. disclose wherein the reduction of the number of bits in the voice sample is performed only for packets transmitted at the beginning of a speech spurt (col. 9, lines 4-5 as set forth in claim 2); wherein a voice sample replacement is performed when no more than 500 ms have passed from a first voice activity detection included in the same speech spurt (col. 1, lines 59-61 and col. 9, lines 1-7 as set forth in claim 3); wherein the reduction of the number of bits in the voice sample is performed by replacing the contents of a voice packet with a NO_DATA block (col. 7, lines 29-31 as set forth in claim 4); wherein the means for reducing the number of bits in the voice sample included in the packet to be transmitted and means for using said saved bits for transmitting header field data of the same packet comprise: a voice coder for converting the voice sample into a bit combination and for producing a voice activity detection indication (col. 1, lines 59-60), a bit rate and frame count calculation block for

calculating the combined bit count for bits in the bit combination transmitted in the packet and bits in the header field after the voice activity detection indication, a frame stealing decision block for making a frame stealing decision based on the calculation result from the bit rate and frame count calculation block, and a real time protocol block generation and frame stealing block for replacing in the packet to be transmitted, subsequent to the frame stealing decision, bits in the bit combination produced from the voice sample (col. 7, lines 51-67 as set forth in claims 6 and 18); a means for reducing the number of bits in the voice sample only for packets transmitted at the beginning of a speech spurt (col. 9, lines 4-5 as set forth in claim 7); wherein the means for reducing a number of bits in the voice sample are arranged so as to perform a replacement when no more than 500 ms have passed from a first voice activity detection included in the same speech spurt (col. 1, lines 59-61 and col. 9, lines 1-7 as set forth in claim 8); wherein the means for reducing the number of bits in the voice sample, a bit rate and frame count calculation block is configured so as to replace the contents of the voice packet with a NO_DATA block (col. 7, lines 29-31 as set forth in claim 9); the controller arranged to reduce the number of bits in the voice sample only for packets transmitted at the beginning of a speech spurt (col. 9, lines 4-5 as set forth in claim 19); and further comprising a user interface for entering data that is provided to the controller and a transmitter through which the packets are transmitted (col. 6, line 31 as set forth in claim 20).

One skilled in the art would have recognized the transmission channel in real time, and would have applied Bladsjo et al.'s real time services in Turner et al.'s speech

packets. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Bladsjo et al.'s system and method for decoding multiplexed, packet-based signals in a telecommunications network in Turner et al.'s methods and apparatus for network signal aggregation and bandwidth reduction with the motivation being to provide a real time service communication can proceed uninterrupted since it will be allocated communication resources regardless of whether or not any packets will be sent (col. 1, lines 51-54).

For claim 12, Turner et al. disclose when installed in the terminal of the packet-switched cellular network (col. 14, lines 8-11).

For claim 13, Turner et al. disclose when installed in the terminal of the packet-switched cellular network (col. 14, lines 8-11).

For claim 14, Turner et al. disclose when installed in the terminal of the packet-switched cellular network (col. 14, lines 8-11).

For claim 15, Turner et al. disclose when installed in the terminal of the packet-switched cellular network (col. 14, lines 8-11).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2416

/William Trost/
Supervisory Patent Examiner, Art Unit 2416